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## North Coast Regional Water Quality Control Board

TO: Diana Henriouille

FROM: Adona White, PE, Water Resource Control Engineer

DATE: May 5, 2020

### **Inspection Report for September 3, 2019 Warrant Inspection Humboldt County Assessor's Parcel Number 212-071-001**

File: Cannabis Program Inspections, Humboldt County, September 2019 HCSO  
CAMP Inspections, Kenneth W. Willis, CIWQS Place ID 861047

#### **Property information:**

County: Humboldt

Physical address: Salmon Creek Road, Miranda

APN: **212-071-001**

Owner: Kenneth W. Willis  
P.O. Box 2141  
Redway, CA 95560

Transaction History (per LandVision): Last sale April 22, 2019, from Seller Ivaniv Boris Borissov to buyer Kenneth W. Willis. Previous sale December 21, 2016, from seller Kenneth W. Willis to buyer Ivaniv Boris Borissov. Previous sale August 15, 2014, from sellers John G. Rohrman Jr. and John G. Rohrman Jr Retirement Plan to buyer Kenneth W. Willis.

Size: 82 acres.

Watershed: Eel River Hydrologic Unit; South Fork Eel River Hydrologic Area; Weott Hydrologic Sub Area (HU/HA/HSA 111.31; Table 2-1, Water Quality Control Plan for the North Coast Region).

Aerial Imagery Notes (Google Earth Pro): Minimal development, possible small structure visible in earliest available imagery (September 1998).

Structure and small surrounding clearing visible August 2005. Expanded and additional clearing, with patterns suggestive of cannabis cultivation visible in June 2010 imagery. Hoop houses visible on clearings, August 2012. Patterns within developed footprints vary slightly over subsequent imagery to present, April 2019.

**Regulatory status with the Regional Water Board:**

Site Development: N/A

Applicable programs: timber harvesting, cannabis cultivation, instream work

Onsite activities/operations: N/A.

Applicable programs: Cannabis cultivation waste discharge regulatory program, State Water Board Order WQ 2017-0023-DWQ.

**Inspection information:**

Date/time: September 3, 2019, ~7am

Type: Humboldt County Sheriff's Office (HCSO)/Campaign Against Marijuana Planting (CAMP) Warrant Inspection

**Attendance:**

David Manthorne, California Department of Fish and Wildlife (CDFW)

Ermias Berhe, North Coast Regional Water Board (RWB)

Adona White, RWB

Akiko Masuda, State Water Resources Control Board's Division of Water Rights (DIV)

Marlen Richards, Humboldt County Code Enforcement

Various law enforcement officers, CDFW Watershed Enforcement Team (WET) and Humboldt County Sheriff's Office (HCSO)

**Background/Objective:**

North Coast Regional Water Board (Regional Water Board) staff participated with staff of the HCSO, CDFW, DIV, and personnel from various law enforcement agencies in four days of inspections of multiple cannabis cultivation sites in Humboldt County, on September 3-6, 2019. Inspection objectives for Regional Water Board staff included observing site development and activities and identifying and assessing onsite features or conditions that are causing or may cause adverse impacts to the quality and beneficial uses of receiving waters, including surface and ground water.

## Inspection Map

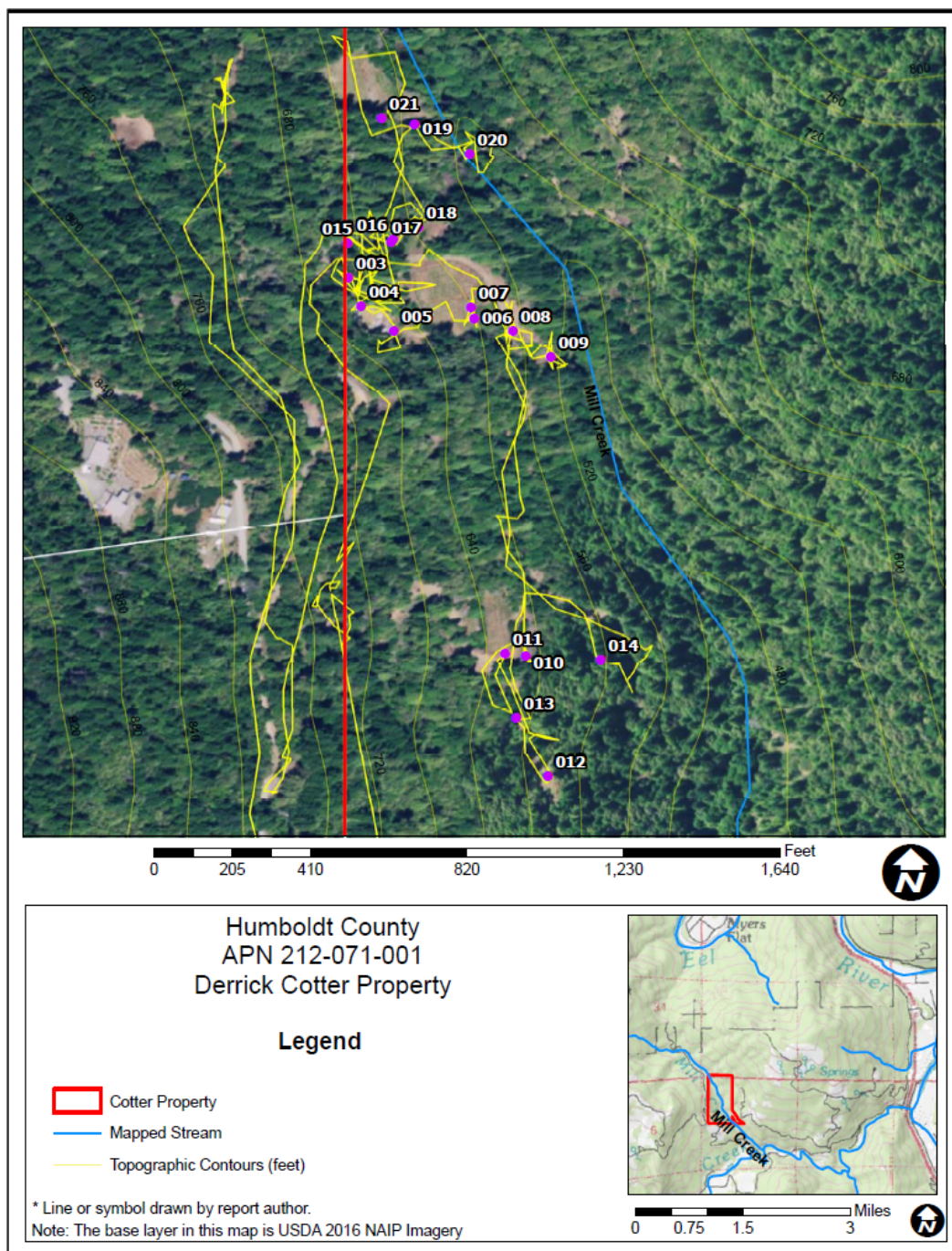


Figure 1. Property map with inspection track (yellow) and Map Point locations discussed below.

## Inspection Observations:

On September 3, 2019, Regional Water Board staff participated in a multi-agency inspection of the subject property. Figure 1, above, shows inspection points identified

and discussed below. The Property is located on the west side of Mill Creek, a Class II watercourse, tributary to Salmon Creek, of the South Fork Eel River. Mill Creek runs from north to south through the Property. Figure 1 shows the areas inspected and identifies Map Points referred to in the text below.

The access driveway is steep, but appeared to have adequate surface and shaping. The driveway arrives to a developed area. The lower portion of the driveway has a long inside ditch that conveys concentrated stormwater and road-related sediment to a Class III watercourse (Map Point 15). The watercourse is routed through an approximately 80' Long, 24" plastic culvert, where it outlets to an excavated onstream, unlined pond that didn't appear to hold water (Map Point 17). From the pond, the outlet pipe discharges to the Class III channel (Map Point 18).

The road continues downhill and northward, to a cannabis cultivation area, CA3 (Map Point 21), then heads southeast, and dives down very steeply to a Class II watercourse, where there is a stringer bridge (Map Point 20). and then continues steeply up the eastern slope above the watercourse. The western road approach concentrates water via a through-cut, and the road surface is rilled due to concentrated runoff. I observed earthen fill pushed off the side of the road where it could deliver into the watercourse. The eastern side road approach is also steep, rilled, and I observed earthen material pushed off the side of the road perched where it could deliver to the watercourse. The siting and construction of both road approaches have caused and resulted in sediment placement and delivery into and where it can enter the Class II watercourse. I observed debris racks/jams both up- and downstream of the bridge. The bridge appears to have the potential to impede the flow of debris. (Map Point 19).

South of CA3, the steep access driveway arrives at a cleared, graded area with a generator shed (Map Point 3) with a vent directing exhaust to the outside ground, four 5,000 gallon water tanks (Map Point 4), and disturbed soil associated with recent earth work for a septic tank for a trailer; the trailer is plumbed to discharge waste into the septic tank (Map Point 5), all adjacent to a large cut and fill flat with greenhouse cultivation (CA1). The disturbed area drains towards a steep section of road, where runoff drains, via a ditch, to the hillside, then continues downslope onto and across, a road without a crossing, and thence to a large gully that is a Class III watercourse (Map Point 8), tributary to a Class II segment of Mill Creek, that appears to be in relatively good condition (Map Point 9).

Along the south edge of CA1, at Map Point 6, I observed cultivation waste that had been pushed or placed over the edge of the roadway, including root balls, potting soil, and earthen spoils. These materials are in the drainage path discussed above, at a location where they are susceptible to contact with and transport by storm water runoff down the road and hillslope to the class III and class II watercourses (Map Points 8 and 9, respectively).

South of CA1, cultivation area CA2 (Map Point 11) is located on a cut and fill flat; cultivation waste and earthen fill has been discarded over the outboard edge of the flat. Runoff from this area and adjacent roads concentrates and has scoured a flow path to deliver concentrated stormwater and sediment to the head of a Class III watercourse at Map Point 13.

South of CA2, we encountered locations of older outdoor cultivation (Map Point 12), older generator and fuels areas, uncontained perlite, and soil bags.

East of CA2, we observed a building used for indoor cultivation (Map Point 14). Outside of this building was an approximately 4' tall, narrow feed barrel, with an open top; inside of the barrel was a trapped a spotted skunk, alive. We tipped the barrel and the skunk escaped.

*Table 1. Description of features associated with threats to water quality.*

<i>Map Point(s)</i>	<i>Feature</i>	<i>Brief Description</i>	<i>Water Quality Concern</i>	<i>Associated Photo(s)</i>
7, 11, 12, 14, 21	Cannabis cultivation at CA1 (7), CA2 (11), CA3 (21), Indoor (14)	Cannabis cultivation in greenhouses, outdoor, and indoor	Cannabis cultivation/disch arge of waste without a report of waste discharge and/or coverage under State Water Board regulatory order	Figures 3-13, 34-38, 48-51, 59-60
15	Road ditch to Class III watercourse	Inside ditch conveys concentrated stormwater and road-related sediment to Class III watercourse	Threatened discharge of sediment to a watercourse	Figure 2
17	Culvert on Class III watercourse to onstream pond	An 80' L, 24"-diameter plastic culvert conveys flow of Class III watercourse to onstream pond	Dredge and fill in waters of state	Figure 3
18	Berm and culvert on Class III watercourse from onstream pond	A culvert is placed in the pond berm with the out to the Class III watercourse channel	Dredge and fill in waters of state	--

<i>Map Point(s)</i>	<i>Feature</i>	<i>Brief Description</i>	<i>Water Quality Concern</i>	<i>Associated Photo(s)</i>
21	Cultivation Area CA3 hydrologically connected to Class III watercourse	Cannabis cultivation (4300 ft <sup>2</sup> ) on cut and fill flat, with outboard edge of flat comprised of loose fill and potting soil drains to the road segment at Map Point 19 and the Class II watercourse at Map Point 20.	Threatened discharge of waste to a watercourse	Figures 4-13
19	Road hydrologically connected to Class II watercourse	Approximately 125' of steep road delivers runoff and sediment to the Class II watercourse at Map Point 20. Upper portion of road is a through-cut.	Threatened and actual discharge of waste to a watercourse	Figures 13-15
20	Humboldt Crossing on Class II watercourse	A log stringer bridge covered with earthen material spans 22' over the Class II watercourse. The bridge is actively eroding and delivering sediment to the Class II watercourse. Wood debris is accumulating both upstream and downstream of the crossing due to the structure impeding fluvial transport	Threatened and actual discharge of waste to a watercourse	Figures 16-20
5	RV Septic Construction	Recent grading associated with septic located near steep slope. Earthwork has caused or created features with high potential for erosion and transport to and into a watercourse at Map Point 8.	Construction-related waste placed where it can enter a watercourse	Figures 30-33

<i>Map Point(s)</i>	<i>Feature</i>	<i>Brief Description</i>	<i>Water Quality Concern</i>	<i>Associated Photo(s)</i>
7	Cultivation Area CA1	Cut and fill flat that drains to a road, contributing to increased and concentrated runoff with delivery to Map point 8.	Threatened discharge of sediment to a watercourse	Figures 36-39
8	Class III watercourse channel head	Class III watercourse that receives runoff from Map Points 5, 6, and 7. A scoured channel traverses a steep slope within a larger older, gullied, unstable feature. The channel delivers fine sediment to the gravel bar of the Class II watercourse at Map Point 9,	Discharge of waste to a watercourse	Figures 40-47
13	Road hydrologically connected to Class III watercourse	Upper road delivers water to a road flat that is hydrologically connected to Class III watercourse	Threatened discharge of sediment to a watercourse	Figures 51-54

**A comparison of conditions observed on the site with categories of activities typically associated with water quality concerns at cannabis cultivation sites:**

1. Site maintenance, erosion control and drainage features: Most of the roads on the property are well constructed midslope roads. Graded flats and specific road segments discussed above are hydrologically connected to watercourses with evidence of sediment transport and delivery to watercourse. I did not observe evidence of any efforts made or measures deployed to control sediment or erosion.
2. Stream crossing maintenance and improvement: The property has culverts on the main driveway, and a stringer bridge at Map Point 20. As discussed above, the stringer bridge and associated road have caused or resulted in discharges and threatened discharges of sediment to the Class II receiving waters.
3. Stream and wetland buffers: I did not observe cultivation-related development within stream or wetland setbacks.



4. Spoils management: As discussed and described above, I observed development-related earthen spoils and cultivation-related wastes at various locations where they could enter or be transported into receiving waters.

5. Water storage and use: As mentioned above, I observed plastic water tanks, documented by the DIV staff. The onstream pond was not holding water.

6. Irrigation runoff: At CA3, I observed one location where irrigation water may have drained from the greenhouse onto the ground outside (see Photo 6). Cultivation areas CA1 and CA3 are hydrologically connected to the stream network.

7. Fertilizers and soil amendments: As mentioned above, I observed an uncontained pile of perlite near Map Point 19. Apart from that, I did not identify any water quality concerns associated with the storage or use of fertilizers and soil amendments.

8. Pesticides: I did not observe any pesticides.

9. Petroleum products and other chemicals: The generator area discussed above appeared to be orderly, protected from weather and with a gravel floor. I did not observe any water quality concerns associated with the storage or use of petroleum products or other chemicals.

10. Cultivation-related wastes: As mentioned above, I observed one area where cultivation waste had been placed where it could enter or be transported into receiving waters.

11. Refuse and human waste: As mentioned above, I observed water appeared to be a recently-installed septic tank near a steep slope. I did not observe or review any other features associated with collection or disposal of human waste.

### **Recommendations:**

1. Retain a qualified professional to inventory, assess, and develop a workplan and schedule to implement measures to ensure that all developed features, roads, watercourse crossings, and cultivation areas throughout the Property are corrected, restored, and/or maintained in conditions that prevent or minimize erosion, sediment transport/delivery, and adverse impacts to water quality and beneficial uses. Include measures to ensure that unstable features caused or affected by onsite development and operations are removed or otherwise protected so as to minimize the potential for these features to cause adverse impacts to water quality and beneficial uses. Dispose of all development and restoration-related earthen spoils in a manner to prevent/minimize transport and delivery to receiving waters.
2. Retain a qualified professional to develop a workplan and schedule to:



- a. Remove the fill associated with the Bridge at Map Point 20 and restore the Class II watercourse and associated riparian area to its natural state.
  - b. Remove the fill associated with onstream pond at Map Points 17 and 18 and restore the Class III watercourse channel to its natural state.
  - c. Dispose of all development and restoration-related earthen spoils in a manner to prevent/minimize transport and delivery to receiving waters.
3. Prior to conducting any instream work associated with recommendations 1 and 2, above, submit to the Regional Water Board an application for Clean Water Act section 401 water quality certification, and secure approval from the Regional Water Board.

The 401 Application may be found at the following hyperlink:

[https://www.waterboards.ca.gov/northcoast/water\\_issues/programs/wqc\\_docs/031616\\_401-Application.pdf](https://www.waterboards.ca.gov/northcoast/water_issues/programs/wqc_docs/031616_401-Application.pdf)

4. Work with CDFW and the State Water Resources Control Board's Division of Water Rights (DIV) to determine and secure any applicable permits or licensing required for surface water diversion, storage, and use on the site. If the existing surface water diversions do not meet applicable CDFW or DIV requirements, remove diversion infrastructure from surface waters and ensure that restoration plans developed pursuant to Recommendation 1 and 2, above, include provisions for restoring any instream or riparian disturbance associated with this features or removal thereof.
5. If the property owner and/or tenant(s) choose to continue to cultivate cannabis, enroll for coverage under and take steps to comply with the requirements of the statewide cannabis order (Order WQ 2017-0023-DWQ, General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities).

More information about the statewide cannabis order can be found at this hyperlink:

[https://www.waterboards.ca.gov/water\\_issues/programs/cannabis/docs/finaladoption101717.pdf](https://www.waterboards.ca.gov/water_issues/programs/cannabis/docs/finaladoption101717.pdf)

6. In the event that the property owner and/or tenant(s) propose in the future to develop or use the Property in a manner or method that will or may result in a discharge of waste to waters of the state in the future, staff recommend that the owner(s)/tenant(s) be aware of and comply with relevant regulatory requirements for water quality protection. For example, Water Code section 13260 requires that a person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than into a

community sewer system shall file with the appropriate regional board a report of the discharge. Further, Water Code section 13264 states, in part: "No person shall initiate any new discharge of waste or make any material changes in any discharge...prior to the filing of the report required by Section 13260." In addition, projects involving the disturbance of an acre or more of land are subject to regulation under the State Water Board's Construction General Stormwater permit, and projects involving dredge or fill in waters of the United States are subject to regulation under Clean Water Act section 401. You may find further information about Water Board permits that may apply to proposed site development or land use activities at this hyperlink:

[https://www.waterboards.ca.gov/northcoast/water\\_issues/programs/permit/](https://www.waterboards.ca.gov/northcoast/water_issues/programs/permit/)

7. Work with Humboldt County to ensure that all domestic and human wastes are collected and disposed of consistent with applicable County requirements.
8. Collect and dispose of or contain all refuse and cultivation-related wastes in a location and manner so as to minimize potential for these wastes to enter or be transported into receiving waters.
9. Store and contain all chemicals, including petroleum, fertilizer and/or pesticides properly to prevent spillage and discharge to receiving waters. Provide secondary containment for all petroleum products.

### **Enforcement Discretion:**

The observations in this report will be assessed for violations of the California Water Code. The Regional Water Board and the State Water Board reserve the rights to take any enforcement action authorized by law.

### **PHOTO APPENDIX**

All inspection photos taken by Adona White except where otherwise noted.



Figure 2. Ditch to culvert inlet on Class III watercourse. Photo by Ermias Berhe.



Figure 3. Culvert outlet to the excavated Pond at Map Point 17.





Figure 4. Access road between Pond and CA3.



Figure 7. Outboard fill at CA3.



Figure 5. CA3 greenhouse. Thick dust covers the road and flat surface.



Figure 8. Cultivation waste tossed over the fill face at CA3.



Figure 6. Wet ground at CA3 due to irrigation.



Figure 9. Loose fill perched at the outboard edge of the fill at CA3.





Figure 10. Slash and debris placed over the edge of the fill slope at CA3.



Figure 11. Earthen spoils placed on the outboard edge of the fill at CA3 (Map Point 21).



Figure 12. Fill slope at CA3, Map Point 21 with loose fill and soil-filled grow bags, positioned to transport down the road to the Class II watercourse.



Figure 13. Road below CA3. Photo by Ermias Berhe.



Figure 14. Below flat road dives steeply via a through cut toward Class II watercourse crossing.



Figure 15. Through cut road approach to Class II crossing (Map Point 19)





Figure 16. Looking at the Class II stringer crossing (Map Point 20) from western bank road approach; downstream is to the right of the photo.



Figure 19. Upstream of crossing, western bank.



Figure 17. Looking at Class II Crossing (Map Point 20) from western bank road approach; downstream is to the right of photo. Note Crossing is constructed of logs and native earth. The crossing acts as a constriction. Sediment and debris accumulation is evident in channel, both upstream and downstream.



Figure 20. Downstream of crossing, eastern bank.



Figure 18. View from crossing surface looking at western bank; downstream is on left of photo. Note erosional voids in earthen material, exposing logs of crossing.



Figure 21. Looking down at crossing from eastern bank road approach which is very steep and entirely hydrologically connected to the crossing.





Figure 22. Eastern bank road surface is rilled.



Figure 23. Perched fill on LB road segment above crossing.



Figure 24. Generator shed and exhaust (Map Point 3).



Figure 25. Interior of generator shed.



Figure 26. Backside of generator shed and air intake.



Figure 27. Generator.





Figure 28. Waste oil containers are contained.



Figure 31. Recent grading on steep slope below septic.



Figure 29. Water tanks at Map Point 4.



Figure 32. Recent graded slope concentrates stormwater down steep road toward CA1.



Figure 30. RV connected to onsite waste system, presumably a septic system (Map Point 5).



Figure 33. Road surface is rilled between septic and CA1.





Figure 34. Cultivation waste including stalks and root balls and soil placed over outboard edge of roadway, unprotected from concentrated runoff (Map Point 6).



Figure 37. Runoff from CA1 joins runoff from the roadway and is transported down the roadway (Map Point 7).



Figure 35. Materials.



Figure 38. on either side of CA1 are roads that are rilled and concentrating stormwater runoff.



Figure 36. CA1 cut bank.



Figure 39. Road runs below CA1 and concentrates the two approach roads, the cultivation flat CA1.





Figure 40. Road below CA1 that leads to point of delivery to Class III watercourse.



Figure 41. Location of Class III below road.



Figure 42. Scoured channel below the road where concentrated runoff is routed downslope via Class III watercourse.



Figure 43. Scoured channel below the road where concentrated runoff is routed downslope via Class III watercourse.



Figure 44. Class III to Class II over older gully.



Figure 45. Class III to Class II over older gully.



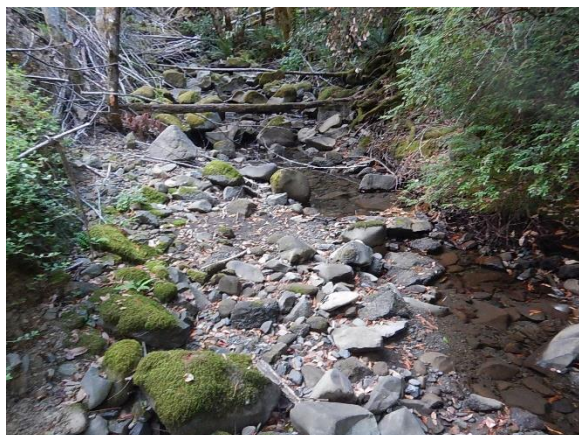


Figure 46. Class II watercourse where Class II enters, looking upstream.



Figure 49. Fill slope of cut and fill flat at CA2 is covered in cultivation waste and slash.



Figure 47. Class II watercourse where Class II enters, looking downstream.



Figure 50. Runoff from CA2 flat concentrates down road.



Figure 48. Fill slope of cut and fill flat at CA2 is covered in cultivation waste and slash.



Figure 51. Runoff from CA2 flat concentrates down road.





Figure 52. Scoured flow path toward Map Point 13.



Figure 55. Older and out of use outdoor cultivation area (Map Point 12).



Figure 53. Discharge from CA2 and road runoff concentrates and transports to the head of a Class III at Map Point 13.



Figure 56. Older and out of use generator and fuel storage area.



Figure 54. Discharge from CA2 and road runoff concentrates and transports to the head of a Class III at Map Point 13.



Figure 57. Uncontained perlite.





Figure 58. Potting soil bags located on way to indoor facility at Map Point 14.



Figure 61. Cultivation waste outside indoor building.



Figure 59. Interior of a building.



Figure 62. Live spotted skunk located trapped in uncovered barrel outside of the indoor building.



Figure 60. Indoor building at Map Point 14.